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APPLICATION NO.	FII	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/993,228	11/14/2001		Raymond J. Mueller	00-106	8478	
22927	7590	07/19/2005		EXAMINER		
WALKER			RETTA, Y	RETTA, YEHDEGA		
FIVE HIGH RIDGE PARK STAMFORD, CT 06905				ART UNIT	PAPER NUMBER	
	,			3622	3622	
			DATE MAILED: 07/19/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
	09/993,228	MUELLER ET AL.
Office Action Summary	Examiner	Art Unit
	Yehdega Retta	3622
The MAILING DATE of this communication app Period for Reply		1
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
 1) Responsive to communication(s) filed on 13 A₁ 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allowar closed in accordance with the practice under E 	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1-3,6,7 and 9-14 is/are pending in the 4a) Of the above claim(s) 4,5 and 8 is/are without 5) ☐ Claim(s) 1-3,6,7 and 9-14 is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	Irawn from consideration.	
Application Papers		
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any accomplicated may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the ld drawing(s) be held in abeyance. Sec ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/3/02, 12/6/01. J.S. Patent and Trademark Office	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	



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DETAILED ACTION

Response to Amendment

This office action is responsive to amendment filed April 13, 2005. Claims 1-3, 6,7, 9-14 are currently pending.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 9-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological art; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical science as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For the process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this

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power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See In re Musgrave, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts". Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See State Street Bank & Trust Co. v. Signature Financial Group, Inc. 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See In re Toma, 197 USPQ (BNA) 852 (CCPA 1978). In Toma, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to Gottschalk v. Benson, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter ... is statutory, not on whether the product of the claimed

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subject matter ... is statutory, not on whether the prior art which the claimed subject matter purports to replace ... is statutory, and not on whether the claimed subject matter is presently perceived to bean improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Free man-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was

already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. In the Bowman decision, the Board acknowledged that the dichotomy of the analysis of the claims under 35

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decision, the Board acknowledged that the dichotomy of the analysis of the claims under 35 U.S.C. 101, thereby emphasizing the fact that not only must the claimed invention produce a 'useful, concrete and tangible result' but that it must also be limited to the technological arts in order to be deemed statutory under the guidelines of 35 U.S.C. 101 the See Ex parte

Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, the independently claimed steps of receiving order information and determining an offer do not require structural interaction or mechanical intervention such that the invention falls within the technological arts permitting statutory patent protection. The claimed step of receiving order information, determining an offer does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of user or by use of a pencil and paper. Claims reciting those steps can be performed by interpersonal communications such that the claimed steps can be performed without a physical structure or

Additionally, for a claimed invention to be statutory the claimed invention must produce a useful, concrete and tangible result. In the present case, the claimed invention produces an offer (i.e., repeatable) prediction (i.e., useful ant tangible). Although the recited process produces a useful, concrete and tangible result, since claimed invention, as a whole, is not with the technological art as explained above, the claims are deemed to be directed to non-statutory matter.

mechanical object. The method only constitutes an idea for determining an offer.

However in order to examine the claimed invention in light of the prior art, further rejections will be made on the assumption that those claims are statutorily permitted.

Claim Objections

Claims 6 and 7 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim. If independent claim recites a method of making a specified product, a claim to the product set forth in the independent claim would not be a proper dependent claim since it is conceivable that the product claim can be infringed without infringing the base method claim if the product can be made by a method other than that recited in the base method claim. Therefore, claims 6 and 7 are improper dependent claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 7, 12, 13 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Katz et al. U.S. Patent No. 6,055,513.

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Regarding claims 1, 2, 6, 7, 12, 13 and 14, Katz teaches method comprising of receiving an order information; determining an offer based on order information, such as, order price; total price or historical offer criteria and displaying the offer (see col. abstract, col. 10 line 56 to col. 11 line 13, col. 16 line to col. 17 line 7, col. 18 line 1 to col. 19 line 58; col. 24 line 4 to col. 25 line 4, col. 26 lines 4-65, col. 27 lines 1-21). Katz teaches the system (upsell) including a decisional bases such as expert system, fuzzy logic, neural networks, adaptive system or other decisional systems known to the art and which effectuate the desired functionalities of the invention (see col. 20 lines 23-62).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz et al. U.S. Patent No. 6,055,513 and further in view of "Heads I win, tails you lose" Business, finance and science; Business; pg 74 (herein after Rossides).

Katz does not teach calculating a difference between the transaction total (after sales tax) and next-highest dollar amount and providing an offer (more than the total amount or less) (see page 1). It would have been obvious to one of ordinary skill in the art to provide an offer based on the difference amount in Katz upsell offer for those who would rather take a chance to get more money or lose the small change, as taught in Rossides.

Response to Arguments

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Applicant's arguments filed April 13, 2005, regarding "101" and "112" rejection have been fully considered but they are not persuasive.

Applicant's arguments, filed April 13, 2005, with respect to the rejection(s) of claim(s) 1-3, 6,7, 9-14 under "103" have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Katz.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Abrahams (US 6,618,714) teaches rule based recommendation system.

Deaton et al. (US 6,516,302) teaches providing offer based on purchase history and order price.

Mueller et al. (US 5,353,219) teaches suggestive selling.

Cragun et al. (us 5,774,868) teaches providing offer using neural network, as purchase adviser.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yehdega Retta whose telephone number is (703) 305-0436. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (703) 305-8469. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RETTA YEHDEGA PRIMARY EXAMINER

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